

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated in the following listing of all claims:

1. *(Cancelled)*

2. *(Cancelled)*

3. *(Currently Amended)* The computer implemented method of claim 24, wherein the rating model defining is performed in accordance with a predefined document type definition.

4. *(Currently Amended)* The computer implemented method of claim 24, wherein the transforming to the executable representation includes compilation of the actuary-manipulable representation to a platform independent executable form.

5. *(Currently Amended)* The computer implemented method of claim 24, wherein the executable representation includes:

predefined input and output interfaces;

a runtime lookup facility for identification of runtime identifiers in the executable representation corresponding to ones of the variables; and

a calculate method of the compiled rating model executable to generate the quote based on inputs supplied via the input interface.

6. *(Currently Amended)* The computer implemented method of claim 5, further comprising:

employing the runtime lookup facility to identify particular runtime identifiers corresponding to particular variables;

setting values for the particular variables using the corresponding runtime identifiers and the predefined input interface; and

retrieving the quote via the predefined output interface.

7. **(Currently Amended)** The computer implemented method of claim 24, wherein the actuary-manipulable representation includes markup language encoded metadata.
8. **(Currently Amended)** The computer implemented method of claim 24, wherein the actuary-manipulable representation is XML encoded.
9. **(Currently Amended)** The computer implemented method of claim 24, wherein the actuary-manipulable representation includes a graphical user interface presentation of the variables, factor tables and computational flows of the rating model based on markup language encoded metadata.
10. **(Currently Amended)** A computer implemented method of preparing an executable representation of a rating model, the method comprising:
defining an actuary-manipulable representation of a rating model, the actuary-manipulable representation including embodied in computer readable media and encoding therein variables, factor tables and calculation sequences of the rating model, the factor tables having one or more axes bound to respective ones of the variables and the calculation sequences defined in terms of steps operative on values of the variables and cells of the factor tables; and
transforming the actuary-manipulable representation to the executable representation, the executable representation embodied in computer readable media and encoding therein resultant computer program code including a runtime lookup facility for identification of runtime identifiers in the executable representation corresponding to ones of the variables and a calculate method executable to generate a quote based on inputs supplied via a predefined input interface, wherein the transforming is performed at least in part by a compiler that executes on a computational machine.

11. (*Currently Amended*) The computer implemented method of claim 10, wherein, for a particular calculation sequence retrieved from the computer readable media encoding of the actuary-manipulable representation, the transforming includes:

decomposing the particular calculation sequence encoded therein into layers, each layer

including those steps thereof that are at a same flow control level;

for each layer, traversing the steps thereof to identify those of the variables used by the layer;

for each layer, traversing the calculation sequence to identify the steps of the layer

targeted by other steps of the calculation sequence and emitting code allocating storage for results of the targeted steps; and

for each layer, emitting code for variable test and index calculations of the layer,

wherein the emitted code is stored as part of an in-media computer readable encoding of at least a functional precursor to the resultant computer program code.

12. (*Currently Amended*) The computer implemented method of claim 10, wherein the transforming includes:

emitting, for a particular calculation sequence, both logged and non-logged versions of the executable representation and encoding same as part of the resultant computer program code.

13. (*Currently Amended*) The computer implemented method of claim 10,

wherein the transforming includes a two-step compilation,

a first step thereof producing a platform independent source form from the actuary-manipulable representation, and

a second step thereof producing the executable representation from the platform independent source form and encoding same as the resultant computer program code.

14. (*Currently Amended*) The computer implemented method of claim 10,

wherein the runtime lookup facility of the executable representation includes in the

resultant computer program code a predefined interface for obtaining the runtime

identifiers corresponding to respective ones of the variables and factor tables of the rating model; and
wherein, upon execution of the resultant computer program code, the runtime identifiers allow client code to set and access runtime storage corresponding to respective ones of the variables and factor tables.

15. ***(Currently Amended)*** The computer implemented method of claim 14, wherein the client code is part of a networked information service; and
wherein the executable representation of the rating model is employed resultant computer program code is supplied for execution on a target computational machine that hosts the networked information service to prepare a quote for presentation thereby the networked information service.

16. ***(Cancelled)***

17. ***(Cancelled)***

18. ***(Cancelled)***

19. ***(Currently Amended)*** A computer program product comprising computer readable media having computer readable program code embodied therein, the computer readable program code adapted to be executed as:

a compiled rating model corresponding to a calculation base including variables, factor tables and calculation sequences thereof, wherein one or more axes of the factor tables are bound to respective ones of the variables, and wherein the calculation sequences are defined in terms of steps operative on values of the variables and cells of the factor tables;

a lookup facility to identify runtime identifiers corresponding to runtime instances of the variables;

an input interface including access methods for setting values for the runtime instances of the variables using the corresponding runtime identifiers; and

a calculate method of the compiled rating model executable to generate result of the calculation sequences based on the set values.

20. (Original) The computer program product of claim 19, wherein the runtime identifiers allow client code to employ the compiled rating model without knowledge of internals thereof.

21. (Original) The computer program product of claim 20, wherein the client code is a component of a networked information service; and wherein the networked information service sets values for the runtime instances of the variables and invokes the calculate method of the compiled rating model to generate a quote based thereon.

22. (Cancelled).

23. (Cancelled).

24. (*Currently Amended*) The computer implemented method of claim 10, further comprising:

executing the executable representation to calculate a quote for an insurance product.

25. (*New*) The computer implemented method of claim 10, wherein the computational machine on which the transforming is performed includes:

a processor that hosts an executable instance of program code executable thereon as the compiler; and

storage accessible to the processor constituting the computer readable media in which the actuary-manipulable representation of the rating model and the resultant program code of the executable representation are respectively encoded.

26. (*New*) A system comprising:

a processor that hosts an executable instance of program code, including a compiler, for transforming an actuary-manipulable representation of a rating model into an executable representation thereof, and

storage accessible to the processor constituting computer readable media for encoding of the actuary-manipulable representation and, based on operations performed theron at least in part using the compiler, for encoding the executable representation transformed from the actuary-manipulable representation;

the actuary-manipulable representation embodied in the computer readable media and encoding therein variables, factor tables and calculation sequences of the rating model, the factor tables having one or more axes bound to respective ones of the variables and the calculation sequences defined in terms of steps operative on values of the variables and cells of the factor tables, and

the executable representation embodied in the computer readable media and encoding therein resultant computer program code including a runtime lookup facility for identification of runtime identifiers in the executable representation corresponding to ones of the variables and a calculate method executable to generate a quote based on inputs supplied via a predefined input interface.

27. (*New*) The system of claim 26, further comprising:

a target computational machine that receives a compiled instance of the resultant computer program code from the storage and that executes the resultant computer program code to generate the quote based on inputs supplied via the predefined input interface.